

A. Certainly, I saw it plainly, and could point it out to you.

Q. Is there much of the ore ?

A. Yes, it is a mountain, and you could get any quantity.

Q. Are lead and antimony found there, (Shisa ? Soorma ?)

A. Yes, in abundance, the latter is exported.

From the foregoing information, it appears to me, that no doubt can exist respecting the existence of copper in the vicinity of the Kunnaraj river, and Bela.

Firstly, Because the guide heard such a report at the spot from the people of the place.

Secondly, Because it was known to the native Sukkaramdass.

Thirdly, Because I have conversed with a person who declares he has been there, and because it is well known to more than one person, that he had procured copper and sold it at Kurrachee.

This statement is clear and distinct, and I think at least worthy of notice and inquiry, if not of implicit belief.

P.S. I have been promised specimens of the ore, and that it shall be melted in my presence ; when brought it is my intention to weigh the ore, and ascertain what proportion of copper it yields.

*Memoir on the Climate, Soil, Produce, and Husbandry of Afghanistan and the neighbouring Countries.—By Lieut. IRWIN.*¹

PART IV.

Husbandry and Cultivation.

165. It was originally my intention to have attempted a treatise of considerable length on this subject, in which would have been mentioned all the cultivated products, as far as ascertained, of all the districts. To this would have been added an account of the operations of agriculture in some of the most interesting and best known of them, with some details of the life of the poor. Various reasons now withhold me from this attempt, and among them the chief is the want of time to execute it with

¹ Continued from p. 1015. vol. VIII.

tolerable accuracy. I have in consequence greatly restricted the plan. The matter which is here to follow, relates to two heads ; 1st, Some particulars of the husbandry of these countries in general ; 2nd, A review of the districts ; in which an attempt will be made to estimate, or enable the reader himself to estimate, their present degree of cultivation, the supplies they yield, their population, and the distinction of their industry ; this is, as it were, the summing up of all. It is much to be regretted, that it is the most difficult, as well as the most important of the subjects attempted, and that in which the conclusions drawn, will the oftenest be found vague, unsatisfactory, and erroneous ; nor could it be otherwise, if we advert to the natural difficulties of the subject, when it is necessary to proceed on report merely. The witnesses, though numerous for the elucidating other subjects, were few for the elucidating of this, which requires many concurring testimonies, and much minuteness of testimony. The local and national vanity of informants, not to mention individual prejudices and hasty judgments, forbid our relying on their opinions as judicious and impartial ; could they be relied on, still there is much difficulty in ascertaining the exact force of those comparative terms, which in all cases must be used, for they assume a different meaning according to the standard to which the mind of the speaker has been accustomed.

SECTION I.—Of Husbandry.

166. Lands in these countries are divided into irrigated and not irrigated, or in the local Persian *abee* and *lulm* ; this last term I have for brevity's sake retained. *Lulm* is itself of various kinds ; that which most strictly deserves the name is commonest in Chuch and the plain of the Mundurs, where the quality of the soil is excellent ; the fields are merely ploughed in the ordinary way, and not divided into partitions, nor is any other contrivance used either for the retaining the rain which may fall on the surface, or for receiving any supplies from other quarters. But in general, *lulm* lands have some advantage in this particular, natural or artificial. In hilly countries the hollows which ne-

cessarily receive part of the rain falling on the neighbouring heights are cultivated in preference; others are so situated that it is easy to turn on them the water of nullahs, and these are not reckoned irrigated, but *lulm*, (see paragraph 78). In Toorkistan, certain lands are distinguished into a class as receiving in the spring a great deal of thaw water. There are other lands, which depend entirely on the rain which may fall on their own surface, but have been provided with a high bank of earth which surrounds them and retains the water; such may be seen at Oormul, a village about 9 miles south-east of Peshawur; they are every year under crop from one generation to another. There is still another species of *lulm* quite distinct in its nature from all the preceding, being land moist in itself, without requiring for the success of the crops raised on it rain or any other supply; such is in Cabul called *za*, and in that, and similar climates, is commonly in the state of natural meadow. In Hindoostan are considerable tracts of it, being the low banks of rivers subject to be under water for a great part of the rainy season, and large spaces lying under the great northern mountains. In Mooltan, where it is considered as the most valuable species of land, it is called *sew* or *seo*, that is literally border, because it lies near the rivers.

167. Irrigated lands too, may be divided into species whose differences it is important to note. Some lands are only imperfectly irrigated. The Kamojoe Kafirs turn the water of springs upon their fields, but the supply is so defective, that summer showers are anxiously looked for. In most cases, rain in the accustomed season is welcome to the owner of even well irrigated lands, as saving him the trouble and expense of watering. Irrigated lands may be divided into those which depend on springs and natural streams; secondly, those which depend on wells; thirdly, those which depend on *kahrezas*; fourthly, those depending on dams. The first kind contains several species. In the vallies of mountainous countries, and in plains under mountains, it is easy to conduct the water of streams from a higher level upon the fields, and this constitutes the first species; but in open and champaign countries the difference of level is seldom so considerable as

to admit of this, it is therefore necessary in watering from the rivers or the canals which are drawn from them, to raise the water by machinery. I have heard that on the bank of the little river Turee, which runs near Jumboo, and afterwards falls into the Chunab, there is a machine for raising water out of it, which is turned by the current of the river itself. But I believe no other instance is known, where instead of the force of the water a living force is not employed; this species therefore approaches to the second kind, or that of wells. In Mooltan and Sindh, the most common mode of watering is by what are called *jhulars*, which are half wells cut out of the edge of the channel within which the canal runs. Jhulars are used by the Daoodzyes and Mihmudzyes, and are not unknown on the banks of the Oxus, in the dominions of Bokhara; but in the whole of Toorkistan, the only mode of irrigation worth attention is the first species, or that in which streams are turned upon the fields.

168. Wells may be divided into three kinds; the 1st is the cutch well, which in Hindoostan they call *Dhenkulee*, or rather that name is applied to the pole, which in this species is used. 2d, The Persian wheel, called in Persian, *Churkh-Chah*; and in Hindoostan, *Ruhut* or *Hurt*. 3rd The bucket well. The first species is proper only when the depth to the water is very small. In the Punjab it is sometimes used in irrigation. In Cabul and Kushmeer it is employed only in wells whose water is drawn for domestic purposes. The Persian wheel is proper for moderate depths; it brings up the water by means of pots, in a manner already described by travellers in Egypt, in which country it is very common. I believe it to be found in Mesopotamia, and in certain quarters of Persia, but in large spaces of that kingdom it is utterly unknown, neither is it known in Khoorasan, and it is barely known in Bactria and the west of Toorkistan. It is this wheel which is worked in the *jhulars* of that country. There was once a Persian wheel in Cabul, but now there is none west of Jellalabad. In Peshawur, Chuch, and Sindh, it is the chief kind used; it even extends into Seeweestan, but in that country streams are partly used in irrigation, and for drinking they have another kind of well, to be

mentioned. Towards the quarter of India, we may trace the wheel through parts of Chuch, Jodhpoor, Oodpoor, and Goojrat as far as Bombay; in the north it extends to Loodhiana, in the upper part of our Dooab, but it is lost as the traveller proceeds thence towards Delhi. There is only one east of the Ganges. There is no doubt that it might be adopted with great advantage in all our provinces, especially where the water is at a medium depth below the surface; but where it is beyond fifty feet, the weight of the pots is so great that the use of it will be no longer economical; and instead, ought to be substituted the bucket well, which is the third species enumerated. It has some varieties, which need not here be adverted to, as only one is well known in these countries. The bucket is of leather, and is raised by a single rope which passes over a pulley, and is drawn by cattle; this is the commonest well in Toorkistan and Khoorasan, where however it is not used in irrigation but only for the supply of water for men and cattle. The pasturing tribes in the west of Toorkistan and north-west of Khoorasan carry buckets with them, with which they draw water. In India this species of wells is on the whole the commonest; in the desert and the arid tracts lying east of it, the water is at too great a depth in the soil to admit of any other.

169. The third species of irrigation is still more expensive and operose. It is that by kahrezas, or aqueducts, by which the water of a hill or rising ground is brought out at its foot in a rivulet, to be disposed of at the pleasure of the farmer. A kahrez is usually made in the following manner:—A well is dug at the spot where it is intended the water shall issue; above it, in the acclivity, is dug another at the distance of from five to twenty yards, according to circumstances and the custom of the place. It is said great skill is required to judge what hills will yield a copious rivulet and in what line it is most advisable to conduct the kahrez. The wells are continued at distances generally equal, until the owner thinks the quantity of water will be sufficient, or until the depth of the wells (which however does not increase at the same rate as the height of their summits in the acclivity) becomes so great that the expense ex-

ceeds the advantage. In Ghaeen, Toorshish, and some other parts of Khoorasan, the highest wells are sometimes 70 yards deep, but in countries better supplied with water, they are much shallower. All the wells are connected below by means of an aqueduct through which water flows to the foot of the hill. Kahrezas are known in almost all parts of Persia and Khoorasan, in the west and middle of Bulochistan, in the country of the Tureens and Bulochees, in the table land of Ghuznee, and even Cabul, but they are not to be found east of that district. There is at present not one in repair in the whole of Toorkistan, but in the last generation a considerable number were dug by Koobad Khan Undijanee, lord of Koonduz, with a view to the cultivation of hilly wastes called the Dushti Jubulda, but they are now gone to ruin. Very good kahrezas will turn a small mill of the country. The most famous is that in the neighbourhood of Ghuznee, ascribed to Sultan Mahmood. Including its branches it is asserted to be 12 koss, but this is probably an exaggeration. Many kahrezas are two miles long, and in some quarters a great one will cost 20,000 rupees. Such works do great honour to those nations, and are one proof out of many of their industrious dispositions.

170. Wells are proper in level champaign countries and plains, in which water is found throughout at a moderate depth; natural rills are chiefly useful within hills of considerable height, or at their foot. Kahrezas are natural to a country when the hills are low and unconnected, and consequently send out no constant streams; but when there are found vallies among such hills, which in the seasons of rain receive the water of the neighbourhood, but are dry during the remainder of the year, it may become advisable to retain that water (to be used when in future most advantageous) by extending a dam across the valley in a convenient situation; these are the dams most common, and which peculiarly deserve that name. The water of a feeble stream is sometimes dammed up for future use; and dams are often required in drawing a canal from a river, or diverting the channel of a constant stream; but such fall under the first species of irrigation. Rain water dams are common in the Soolemanee hills, and in some quarters of Seeweestan. There

are ruins of very magnificent dams within the Paraparnisan mountains. Somewhat similar to dams, are tanks, very much used in irrigation in some quarters of India, but very little in any of those countries, and in most of them not at all. The method of scooping water is probably unknown beyond the provinces which border on India.

171. India has two harvests in the year, the products of which are for the most part distinct, but not always. The *rubbee*, sown in autumn and the beginning of winter, is cut in the spring, and consists chiefly of wheat, barley, chunna, musoor, peas, and beans, most of which are raised in cold climates also. The *khureef*, sown during the rains, or immediately before them, is reaped in the autumn, which is the harvest time of the higher latitudes; but the khureef products are seldom capable of being cultivated to advantage in them, being rice, maize, jooaree, bajra, moth, moong, oord, murhwa or baggy, and some others. These two harvests thus distinguished, extend as far as Jellalabad and Lughman, and generally to the cold climates; but these last, and also the warmer ones beyond them, are commonly said to have the rubbee only; this is strictly true of the very coldest,—such as the Tibets, the greater part of the Huzara country, the upper parts of Budukhshan, and some others; but with respect to the more temperate, some circumstances may be stated in modification of it. It is of little importance what phraseology we adopt, provided the facts be kept in mind.

172. Even in Cabul many products of the khureef are actually raised, and probably all might be raised. In the whole of the west of Toorkistan beyond the Oxus, and of Bactria, jooaree is one of the greatest crops in the country, and does not fall short of the Indian either in quantity or quality of produce. We may trace it into the country of the Kuzzaks and Kirghizes. Maize grows in all but the coldest countries, as well as in India, except that there it is sooner ripe. It has been but lately introduced into Cabul, Candahar, and most other of the neighbouring countries. In those quarters it is raised not to be ground into flour, but be eaten whole after being roasted. Mash, which includes oord and moong, is a common produce in Toorkis-

tan, parts of Khorasan and Afghanistan. Rice is the chief corn of Kushmeer, and is raised in all but the coldest countries, provided there be a sufficient supply of water; it seems however to degenerate in quality in such countries. In the warmer parts of Khorasan, were there but summer rains as in India, the khureef might be expected to be equivalent to the rubbee. Not only can we trace some of the products of the khureef into the moderately cold climates, but we may mark two harvests tolerably distinct in their seed times and their products. This may be exemplified by a sketch of husbandry of the valley of Cabul. The great seed time is the autumn, in which are reaped wheat, barley, musoor, and peas; these are reaped chiefly in the month of June, having lain under the snow during winter and been protected by it. All of them are sometimes sown in the spring, and this practice is far commoner in Budukhshan and many other quarters, but the spring-sown are cut nearly at the same time with the autumn-sown. To this harvest belongs chunna, which is very rarely sown in the autumn, but beans are sown about the end of May and reaped in the end of September; the autumn-sown products, together with chunna, may be said to form the rubbee of Cabul, which is by far its greatest crop. There remains however some considerable products which have different harvests. Besides beans, which in India belong to the rubbee, we may mention the two grains there called *cheena* and *kungunee*, in Persian *urzun* and *gal*. In India they are scarcely considered as belonging to any season, for by the help of water they may be raised equally well in all. The cheena however is more commonly cultivated in the rubbee, or rather after it, and the kungunee in the khureef. In Cabul they are raised sometimes for fodder and sometimes for their grain. In the latter case they are sown in the beginning of May and reaped in August. Maize and mash are sown a few days later, and reaped in September. Rice, a far more important product than maize, is sown in May and June, and reaped the end of August and September.

173. It is even practicable in this valley, by good management, to gather two crops within the year off the same ground. In India the farmer usually contents himself with one crop in

the year, and the rubbee and khureef lands are distinct. In Cabul there is a similar distinction between spring lands and autumn (buharee and teeramahee). A good farmer ploughs his spring lands in autumn, and gives them a red winter fallow; and his autumn lands in spring, giving them a red summer fallow; but where plenty of manure is to be had, he both gives more to his fields and exacts more from them. After cutting his wheat, barley, and other rubbee products, but especially after barley, he ploughs and sows other things which come to their perfection in the autumn. Kungunee and cheena intended to ripen, can scarcely, in Cabul, be raised after wheat, but may be raised after barley, which is about twenty days sooner. In Bulkh considerable quantities of these grains are raised after barley, and sometimes after wheat, for the harvest there is earlier. In Cabul they may be cultivated for fodder even after wheat. The kungunee, when its ear is forming, is eaten down by sheep or other animals; the cheena is reaped in the same state and given to stack. In Bulkh they sometimes raise maize, mash, melons, and garden vegetables and greens, after wheat and barley; but chiefly in Cabul, certain only of these can be raised to advantage in this manner, for the land is there scarcer than in Bulkh, and the farmer studies to draw the utmost from it; the lateness of the harvest and coldness of the autumn often defeat his intention.

174. The grains and garden vegetables just mentioned are, in general, the same which are cultivated in England—carrots, turnips, radishes, cabbages, lettuce, cauliflower, onions, garlic, &c.; to these are added some from India. The mothee of India gives but little produce in Cabul. The shukurkund, or sweet potatoe, is not known even in Peshawur. Most garden vegetables are cultivated in spring ground, some in ground lately under rubbee. Melons are commonly raised in spring land. In Bulkh it is customary after cutting barley, to plough, manure, and sow a mixture of mash, musk melons, and water melons, which all ripen in the autumn. In Candahar there is no difficulty in raising the paliz (for that is the name given to a crop of melons or cucumbers) after the rubbee. Great quantities of manure and water must be given to the paliz. In certain places in the

east of Bactria, however, it is lulm raised. Next to their fruits, the natives dwell on the excellence of their paliz, and it forms no inconsiderable object of attention to the farmer; it is most abundant in the neighbourhood of cities; in very remote and rustic parts it is unknown, but they are few. Few things that are cultivated, derive their qualities so much from the soil as from some unknown circumstances. Futehabad, on the road between Jellalabad and Cabul, is famous for the excellence of its water melons; near this place Shujaoool Moolk was defeated in June 1809. All the products which have been mentioned, including paliz, are, in Khoorasan, included under the name *subzbur*, except wheat and barley, which are called *sufedbur*. In Toorkistan, the terms *kupood*, *burgee*, and *sufedburger* are substituted. The distinction is recognized in the revenue system, and the rules of collection from each are sometimes different.

175. The boast of the natives is their fruits. Those of Cabul are acknowledged to be good, even by the Persians, whose country is celebrated for its fruit, and who are generally loth to commend any other. The Cabulees probably lavish too high praises on their fruits. Their pears at least are but ordinary; their apples are inferior to those of Kushmeer, and even they, when brought to India, are not so good as the English or American. It is but just to observe, that the most delicate and luscious varieties of the fruits are not capable of being preserved for exportation, and a foreigner cannot judge of their merits, without visiting the place. The following are the chief fruits of Cabul—the apple, pear, plumb, cherry, peach, apricot, quince, mulberry, pomegranate, almond, walnut, and grape. The fruit called Allo Bokhara, is not here raised; it is quite unknown at Bokhara. The greatest quantities are raised in the district of Ghuznee, whence it is exported, but some are produced in particular places of Khoorasan. The mulberry has been already mentioned, and appears to be a most important object of culture in certain parts of the country; the walnut is cultivated in the neighbourhood of Cabul, but on the whole, it ranks rather as an uncultivated, than a cultivated product. In the valley the season of fruit begins about the time that the

barley is reaping. The earliest species are certain kinds of mulberry, the plumb, and a kind of apple called Jaurisigurma. The latest fruit are certain kinds of apple, which ripen in the end of September and beginning of October. The apricot is very abundant in Ghorbund. The grapes of Cabul are much celebrated, and comprehend many varieties and degrees of estimation ; the earliest are ripe in the last days of August. The fruit gardens of Cabul on the whole, occupy a considerable part of the valley, and furnish one of the greatest exports of the country. In Khoorasan the fruit is good, but it does not form a prominent object of culture. The pomegranates of Candahar are large and good ; some are exported. The natives of Toorkistan boast of the goodness of their fruits, and probably with justice, but little reaches India. The quince of Peshawur is said to excel all others. The place produces no other fruit of remarkable goodness.

176. Hay is known in most of these countries, but not in all places of them. We have already seen that most of the pastoral nations trust the subsistence of their stock during the winter to the withered grass still remaining in the pasturing grounds, even though it have been buried to a considerable depth under snow. I have already mentioned the custom of the Hazard Ymaks, and others, of reaping the natural grass of their pastures, to serve as fodder during the winter. With respect to the provinces towards India, and formerly part of it, their customs, in this respect, are the same as those of that country. No natural grass is reaped for hay ; the only exception I am acquainted with in the whole of those wide countries, is the custom in the countries east of the great Indian desert of cutting grass at the end of the rains. A provision of grass is reckoned necessary to enable a town to stand a siege. The cultivation of artificial grasses is (I believe) quite unknown in India, but it is very common to sow certain of the khureef products, such as jooaree and moth, with a view to cut them before ripening for the stock. When so intended, they are always sown thicker than usual, and called *churee* ; part is given green, but more is reserved to be dry food during the cold season. The same custom prevails in Cabul

with respect to cheena and kungunee, as already mentioned, (see paragraph 172) ; but what corresponds to our clover and hay is the rishka and shufteer. These plants are found in a wild state in many parts of these countries, as has already been mentioned (see paragraph 124). The shufteer is an annual, or at least is cultivated for only one year from the same seed ; it is generally sown in the autumn. The first reaping is, in Cabul, about the 30th of April, and it may be cut again twice or thrice during the course of the summer and autumn. It is little cultivated in Khoorasan. In the district of Hirat, it is sometimes ploughed in, without having been once cut, to serve as a preparation for rice. It is scarcely cultivated in Toorkistan, where it is very commonly wild. Rishka seems to be a much superior plant. It is represented as a perennial, and is in fact allowed to remain on the ground ten years, sometimes fifteen. It is cultivated in Cabul and all the countries west of it, but both rishka and shufteer are unknown in Peshawur ; they require much watering. Rishka is generally sown in the spring.

177. A custom little known in India is, that of cutting what are called khuseels. By this is meant the cutting out the leaves of wheat or barley, before the stalk has risen, to be given to horses or cattle. In Peshawur it is thought that barley may be thus cut twice, or even thrice, with little or no injury to it ; but wheat is more delicate in this respect, and many condemn the cutting even one khuseel of it. In Cabul no khuseels are cut, and perhaps the custom is pernicious in that climate. It is very common to eat down by cattle, the young leaves of the wheat and barley in the autumn or beginning of winter. In the Kuchhee of Mohummud Khan, both customs prevail, and the cutting of khuseel is common in most parts of the Sikh country. When a crop is likely, in the Punjab or Peshawur, to turn out an indifferent one, or when danger is apprehended from military violence, the farmer sometimes thinks it advisable to cut it down, even when the ear is formed, as a khuseel, and instead of it to sow some other product. Khuseels, in the sense first explained, are cut in all provinces of Persia ; they are thought to be a good food for animals.

178. The rubbee of India and of the warm provinces of the

Afghan monarchy as far as the hills to the west, is almost invariably autumn-sown. In our upper provinces, the month of October is the best month for sowing, and that in which most is sown. Moderate rain before sowing, or in lieu of it, one watering, is favourable to the future crops, but not reckoned indispensable. In the neighbourhood of Peshawur, the owners of lands capable of irrigation never fail to give one water before sowing wheat or barley. This is called in the local dialect *tleap*, and is not considered as included in the number of waters commonly said to be given to these crops. Beyond Jellalabad there is not the same uniformity of practice with respect to seed time as formerly observed; all the products of the rubbee are, in Cabul, occasionally sown in the spring, and cheena is always so treated. In Ghobund the whole of the barley is spring. In the district of Ghuznee there is on the whole more spring corn than winter. In Budukshan the barley is generally spring, as well as a part of the wheat. In the whole of Toorkistan and the greater part of Khoorasan, the whole of the cheena is spring. In Candahar it is true most of it is winter, and spring corn is but little known in that district; but in the country of the Hazaras, except the most temperate parts, all the crops are spring; the same is true of the most lofty parts of Budukhsan, Durwaz, Keerategin and Wukheeha, the Pamer, a considerable part at least of Kashkar, and all the Tibets. From the last, the custom has spread to Kushmeer, but the rubbee there is inconsiderable. It will be found in most cases true, that the greater the cold of the place, the less of winter crops; another rule usually holds, that where the lands are irrigated, there is more winter corn, and vice versa. The chief reason assigned is, that lilm crops sown in the autumn are subject to be hurt by the frost; but the owner of irrigated lands can protect his young crops from its rigour, by watering them. This water is therefore called *yukhab*, in Persian. In Keerategin alone, the rule is reversed under peculiar circumstances.

179. In our upper provinces, the harvest of wheat and barley is in March and April. It is observed that the south-east is earlier than the north-west; but the difference is not considerable. The rule however holds good in our further progress to

Peshawur, and between the harvest of that place and of Delhi there is at least one month. On the 20th May, there was wheat still uncut in the valley of Peshawur; Bajour, Koonur, Jellalabad and Lughman are somewhat later. It is a common saying in the country, that the rubbee comes from the east (that is, begins soonest in that quarter) and the khureef from the west. The latter fact it is not difficult to explain, for the khureef here meant, is the Huramee khureef (so called in the country) which is sown in the end of May, or earlier, and is artificially watered. The causes of the former fact deserve our attention. They seem to be the following. 1st, As we proceed north-west, the heat of climate declines, and crops ripen a little more tardily. 2nd, To the west the periodical summer rains become later and later, and hence the seed time, and as depending upon it the harvest of the khureef, is retarded, which has a natural tendency to retard the seed time and harvest of the rubbee. 3rd, A great proportion of the rubbee is sown on low lands (see paragraph 166). The consequence is, that the seed time must be deferred until these lands become capable of tillage, by losing a portion of the moisture they have gained during the flood of the rivers and the periodical rains. In the second place, crops sown on such lands are later in ripening than the crops of higher lands.

180. All parts of the valley of Cabul are not of the same temperature, and in the ripening of crops on soil and exposure, June on the whole is the harvest month. Ghuznee is some days later than Cabul, and the Hazara country considerably later than Ghuznee. In Seatsung of the Hazaras the harvest is in October, and snow sometimes falls before it is gathered. Candahar is a little later than Peshawur. Bokhara seems equal with Cabul, and the harvest of other places may be calculated with tolerable exactness, from the temperature. The Pamer however is very early. The Kirghizes during their visits to it in the summer, cultivate some wheat, barley, and cheena. There wheat though later sown than the little spring wheat sown in the dominions of Bokhara, is sooner ready. We may here notice a curious circumstance with respect to the corn of the highest countries. The wheat of Tibet, the Pamer, and the Hazaras, is

bearded like that of India, but the barley (especially of Tibet) is unbearded. Not less singular is that species of barley well known in Persia, in Mushhud, Goonabad and some other parts of Persian Khoorasan, under the name of jouitoorshee. That part which is intended for seed is given to horses, with such precautions as prevent its being triturated, and thus losing its vegetative power in the body of the animal; when afterwards sown in the spring it comes to perfection in sixty days.

181. The scythe is unknown, and crops are reaped by the sickle. Wheat and barley are, in Toorkistan and most other quarters, separated from their straw on the field. In Cabul the straw is reckoned equal in value to the grain, and to prevent its dissipation, most farmers carry the crop after reaping and drying to the farmstead and there separate them. In these countries, as in India, the rubbee crops are trod out by animals, not thrashed; to these there are few exceptions. In Kushmeer the labour of men is cheap, and there all crops are separated from their straw by being beaten with sticks. I recollect to have heard of the flail being somewhere used. The methods of preserving corn are various. In Toorkistan the most common practice is to lodge it in *juts*, which locally they call wells, but in Tashkund Week-kheeha, and Keerategin, *kundoos* are commoner. These are well known in Hindustan, and are made above ground of mud and straw. In such are lodged a great part of the grain of Cabul, Ghuznee, and Khoorasan, but in cities, granaries belonging to individuals are upon a much greater scale. Many of the Dooranee have considerable stores of former years lodged in their houses. This resource secures that country from even the chance of a famine; and famines are rare in any part of the countries in question; the most common cause is the devastations of locusts.

SECTION II.—*A Review of the Districts.*

182. In the following review of the districts, I shall altogether omit some considerable spaces of country which have been mentioned under preceding subjects. The late embassy in Sindh must have procured information respecting the Tal-

pooree dominions, much preferable to any I can offer. During our inquiries we have always experienced great difficulties in gaining just and consistent accounts of Bulochistan, and I have learnt that government have lately received some information respecting that country; on both accounts I intend passing most of it in silence. To the south we begin with Keharapoor, and the line between it and the neighbourhood of Candahar. In my opinion there is no other line with which it so much behoves us to be well acquainted, and I therefore feel the greater regret, that the information yet obtained regarding it is so unsatisfactory. The country immediately north of it, constituting the southern part of Afghanistan, is still more obscure, and there are certain places, the routes between which we have never been able to obtain. In the account of Candahar, something will be said of the Doorraanee country and Seestan. With respect to Persian Khoorasan, it will also be mentioned, though very briefly. We have to regret that our information is often the most scanty concerning those countries whose position and other circumstances render them most interesting in a public view. To the north I shall omit the Punjab as far as the river Hydaspes, as being little different from many provinces of India, and because of information already obtained of it.

Four Tuppas of Cabul.

183. The rubbee is the greatest crop, and according to our way of speaking, the only one (see paragraphs 171—3.) Wheat is the chief product, and after it barley. The poorest classes consume a considerable proportion of barley and peas in their food. There are none so poor, but that they occasionally indulge in animal food, and the rich in a great measure subsist on it. Corn is imported even from the environs of Ghuznee. Rice is brought from upper Bungush, Jellalabad, Lughman, and even Koomer; in a dear year, corn is sometimes brought from Bamean in small quantities; on the whole however the quantity of corn annually imported into the valley does not bear a great proportion to that produced in it, and provisions are seldom dear. The chief supply of ghee is from Bamean, the Hazara country, and the Ghigies, who pasture their flocks

in the southern parts of the valley and its skirts ; some is brought from the extremities of the Hazara country. From Toorkistan are brought sheep, but seldom either ghee or lambs. From the Hazara country come considerable numbers of sheep. In the spring, lambs are had from the Ghiljies. Horses and ponies are imported from Toorkistan, but some are fed up in the valley. The people drink from streams, but those of the city in part use wells. Fuel is brought to the city chiefly from the south ; the chief supply of timber is from the mountain Kul-kucha, three days to the east of Cabul. In the valley itself there is a good deal of cultivated wood, being that of fruit trees, willows, and sycamores. In Kohistan there is abundance of natural timber, but it is not required. The orchards of this valley, which are very numerous, are chiefly in the Kohdamun, and in it the valley of Irtalif is much celebrated for the excellence and profusion of its fruits, and also for its picturesque beauties ; still the most interesting object to the people is tillage. The chief pasturage is in Logur and the south, as also towards Ghorbund. The Tuppa of Bootkehak is that in which agriculture is most pursued. In the whole valley the watered lands much exceed the unwatered, but in the southern skirts there are some small spaces in which the reverse is true. Fodder is scarce and dear in Cabul, and most parts of the valley ; artificial grasses constitute a considerable part of it in those quarters where pasturage is much pursued. A part of the population live under tents, in summer but otherwise houses are used, and the most common kind is the flat, roofed. In Cabul, which is a close built town, house rent and ground rent are very dear. The chief live stock is in cows, except where pasturage is followed, and there sheep are a more important object. A considerable trade is carried on by the Cabulese, especially with Toorkistan and Hindoostan ; the late distractions have thrown obstacles in the way of trade, but otherwise little affected the prosperity of this city and district. The population of the city may be guessed at 60,000 souls ; the villages are various sized, and on an average may contain 150 families ; they are not fortified, but invariably contain small castles or private forts, of very contemptible strength. There are few wastes or spaces ill supplied with

water in this district ; such as do exist are towards the southern and north-western limits. With respect to carriage, bullocks are chiefly used within the valley ; those who trade to Koora-san employ a majority of camels ; goods taken into the Hazara country are carried on mules and ponies ; the Ghiljies who trade to Toorkistan by the road of Bameean use camels. In the trade to the eastward, including all quarters, equal use is probably made of camels on the one hand, and mules and ponies on the other.

Ghorbund.

184. This is but a small district, and on the borders are large tracts which are merely pastured ; but except the waste called Regrawan (see paragraph 99) there is no considerable space where the water of springs or streams is not to be had. A great part of the district is hilly, and though the hills be often of a tame character, some of them yield pine. The houses of the district are flat-roofed. In the summer a part of the population live under black tents. The pasturage is very important, but still the chief subsistence of the people is from agriculture. There are very numerous orchards, and the chief fruits are apricots, almonds, and grapes. Raisins are brought from Ghorbund to Hindoostan. The chief cultivation is along the stream of Ghorbund, and of course the proportion of lulum is very inconsiderable. The chief product is wheat, and after it rice, notwithstanding the coldness of the climate ; after rice is barley, which is chiefly spring sown ; there is little paleze or maize, nor are pease much raised. Wheat, sheep, the ghee of milk, and that of doomba fat, are exported to Cabul, and of course provisions are cheap. The people, who are not very numerous, live much at their ease, and the climate is healthy. The Kheshkees, a small tribe of Afghans who reside here, carry on some trade between Cabul and Toorkistan. Grass in the summer is very abundant. Some rishka is also cultivated for the wants of winter. The chief live stock is sheep, but their cows are in a considerable proportion. The pasturing people breed some horses, chiefly of a small size. Within the district the chief carriage is probably on ponies. For fuel they burn shrubs and

sometimes the branches of trees, and they drink the water of streams and springs. The chief village of the district, which is called Ufzul Khan, may have 200 houses, all the others are much smaller.

Kohistan of Cabul.

185. The term **Kohistan**, when used by the Cabulese especially, is seldomer applicable to a hilly country in general than to that mountainous space which lies north of the valley of Cabul; every valley in it has its stream, and there are many springs among the mountains; timber too is plentiful, and in the summer, grass. The inhabitants chiefly subsist on mulberries, and after them perhaps their grain and their live stock are of equal importance. I know not that any of the tame animals can be said to be the favourite stock. Of grain, wheat is most cultivated, and after it kungunee and barley. Some grain is imported, especially from the Kohdamun, and the returns are made in cheese, which is here very good, and cotton, a product we would not have expected in a country so cold. On the whole, however, there is but little trade internal or external, and the people live much to themselves. The country is strong, and at times refuses revenue. The people live in flat-roofed houses, and those who attend the live stock to the mountains in summer do not use tents. The villages are small but numerous; and though the surface under the plough be little, the population is not inconsiderable. Wheat and barley, with very few exceptions, are autumn-sown and watered.

Jellalabad.

186. This district is very diversified, and many of the following observations are not true when applied to certain parts of it. It may be said to begin in the eastern quarters, near Umburkhara, in the vicinity of the Markoh or Bedoulut, to extend west to Nimla Kuja, a town of the Khogeeanus, a tribe of Afghans, is within the revenue division, and being situated nearly on the crown of the range of 34°, which is here moderately high, is a cold place. The other towns and villages, with but few exceptions, are in a warm climate, and there are

two crops in the year, as there are in Kuja also. The chief subsistence of the people is from tillage, but they have considerable herds of cows and buffaloes.

It may be observed, however, that in these countries the keeping of both these animals depends, or is supposed to depend, on agriculture. In the winter great flocks of sheep pasture in certain parts, but they do not belong to the inhabitants of this country, but to the Ghiljies to the west. The khureef is the greater crop, and in it, rice; but the quantity of maize is also considerable. The wheat, barley, and maize are nearly equal. A part of the wheat and barley are raised lilm, and some is spring sown; all the khureef is irrigated except it be some jooaree, which is raised for green food; that plant is not cultivated for its grain in any of the districts north of the range of 34°, and bajra is not to be seen. In Jellalabad the quantity of chuna is very small. For watering their lands they use living streams, and in certain parts rills from springs. There are no kahrezas, or dams, but in some quarters khwurs are turned to account. Wheat is imported from Bajour into the town of Jellalabad, which may contain 10 or 12,000 inhabitants. To Cabul is exported sugar and cotton, some apricots and pomegranates; the pomegranates of Kuja are much esteemed. Cabul returns chiefly dried fruits. Jellalabad lying on the road from the east to the west, certain of the inhabitants of its villages subsist by the hire of mules and other animals; and the supplying of provisions to travellers of all descriptions is an important object. Fodder is in general but moderately plentiful. For fuel they burn dung, shrubs, and those along the river, drift wood. The chief supply of timber is from the white mountain, and others connected with it. The houses are flat-roofed. In the villages they drink from streams or springs. In the town there are also some draw wells. There is little fruit compared with the countries to the west; and if we subtract the transit trade, the district carries on but little traffic. The inhabitants are few who use tents in any season of the year. Their villages are small, and there are considerable tracts, both hill and plain, without cultivation, and some of these without water. Bullocks are the chief carriage within

the district, and in its intercourse with others, perhaps mules are most used.

Gundumuk—Ishpan—Khingul—Tugao, &c.

187. By means of these names it is intended to designate that space of country which lies between Cabul and Kohistan to the west, and Jellalabad and Lughman to the east, being itself bounded to the north and south by two great ranges of mountains or their branches. It is very diversified, and its importance is not sufficient to justify the lengthened details requisite for fully explaining the nature of its various parts. A very great part of it, or its borders, is uncultivated pasture, chiefly hilly; there are few considerable spaces destitute of water. The villages are generally small, but there are some large ones. The population of a given surface is greatest in Tugao; Khingul and Tugao belong to the Safees, a tribe of Afghans formerly more numerous than now, and lie to the north. South of them, in the present tract, are Ghiljies and some Khogeeanus. With the exception of Tugao, the khureef is the greater crop in this tract, and of it, rice and mash; and quantities of these are exported to Cabul. The rubbee harvest being here earlier than in Cabul, a portion of the crop is sold in that city to great advantage immediately before the harvest commences in the valley. With respect to the fixed inhabitants, agriculture is more important to them than pasturage, and cows are their chief live stock; but as the wandering Ghiljies from the west pasture their flocks here during a part of the year, it is a matter of doubt whether the district is to be called an agricultural or pastoral one. The numerous flocks of the Ghiljies consuming the grass, fodder bears a considerable price, especially in the cold part of the year; but in Tugao it is cheap. The natives live in houses which are flat-roofed, and timber is easily procurable in most situations, as is fuel from shrubs or branches of trees; and they drink from the numerous springs and streams. Provisions are cheap, but it is to be remembered that the population is small. Some sheep are bought from the Ghiljies. Besides provisions some pomegranates and other fruits are sent to Cabul before they come in

season there, and this district is distinguished by making a little silk. The crops are irrigated with few exceptions, and the quantity of rubbee, which is spring-sown, is but little. Within the district bullocks are the chief carriage. The climate is different in various places, but on an average is a temperate one.

Lughman.

188. Nature has divided Lughman into two districts,—the hilly, inhabited by Ghiljies, and the plain, inhabited by Lughmanees, a race of Indian descent. In both however there is abundance of water, timber, and fuel. The houses are flat-roofed, and the people drink from streams, or in the hilly tract from springs. Among the hills, black tents are used by some of the shepherds in summer. The temperature is much milder than in the Kohistan of Cabul; the country does not appear to be strong. The term Kohistan without the addition of any other to explain it, is not applicable to the hilly part of Lughman. Both there and in the plain the khureef is the chief crop, and rice the chief product. Among the hills maize is the next important to rice, but very little is raised in the plain, where, in its stead are raised sugar and cotton. In either quarter the quantity of wheat is but little, and barley is scarcely raised at all, rice straw being the chief food of the horses. Their horses are not numerous, and they have no camels. Within the district the chief carriage is by bullocks; among the hills the chief stock is perhaps goats, and after them cows, but in the plains the chief stock is buffaloes. Almost all the lands are watered, and chiefly from streams; the climate of the plains is accordingly moist, and agues common. The little rubbee raised is almost invariably autumn-sown. The cultivation and population are considerable. To the west however is an extensive waste, being a plain with small hills, and yielding little water; it is called the plain or desert of Shytan-goom. There are some large villages which may have 800 houses, but in general they are small. There is little fruit, and the chief trade is in rude produce. Wheat is imported from Bajour; ghee and sheep are brought

from the Ghiljies during their annual visits to the low country, when some of them pasture on the skirts of this country, and others pass through it. Sugar, cotton, and rice are exported to Cabul.

Koonur.

189. Koonur is an agricultural country, though there are certain dependencies of it to the north-west which are perhaps pastoral, but they are of little account. The chief crop is the khureef, and the chief produce rice, part of which they export to Cabul, the country of the Upper Mihmunds, which lies east and south, and some other quarters. The population is considerable along the banks of the river. The capital, which is called Pushut, is equal to Jellalabad, and there are some large villages; but generally speaking the villages are not so large as in the plain of Peshawur. Into Pushut they import some wheat from Bajour. Ghee is brought from Deogul, and other hilly dependencies to the west of the river; sheep and goats from Bajour; but provisions in general are sufficiently cheap. In the valley cows are the chief stock, and after them buffaloes; the chief carriage is by asses. Fuel, fodder, and water are plentiful, and timber is procured in abundance from the west side of the river. There is also some pine in that part of the Upper Mihmund country which borders on Koonur, and in which the Syyaed of Koonur has influence. The people live in flat-roofed houses, and never use tents. Their fields are almost all irrigated, and their wheat and their barley, which are not great crops, are autumn-sown. The wood of the olive is much burned.

Bajour.

190. This also is an agricultural country, and cows the most important live stock; yet the pasturage, and number of sheep and goats is considerable. There are no black tents used; in many cases however the shepherds pass the summer under what are called koodies, which are made of mats supported by wood. These are erected at what the Afghans call bandas, which are pasturing stations remote from the village, and at them

is sometimes a few acres of cultivated ground, but no inhabitants in winter. This however is not the only meaning of the term. The fields of this country are generally *lulm*, though the quantity of irrigated is still considerable; part of the *lulm* has the advantage of water from *khwurs*. Wheat is a chief product, and in ordinary years more than a maund and a half of Delhi may be had for a rupee, and the exportation is considerable. The northern part however does little more than supply itself. It does not appear that any sort of provisions is imported into the country. The quantity of sugar raised is very small, and that article is imported chiefly from Jellalabad in return for wheat. Fuel, timber, and fodder are sufficiently plentiful, especially in the hilly parts, and water is every where near, the people drinking from springs and from streams; there are few wells. A certain shrub, by the Afghans called *tirkh*, is the chief fuel. Nawangee is perhaps the largest town, Bajour itself being much declined, and the former may be equal in population to one-half of Pushhut. The villages in general are small or ordinary. On some of the frontiers are considerable spaces without fixed inhabitants, and the centre of the country is not so well peopled as the plain of Peshawur. Bullocks and asses are most used in carriage, and there are not many horses in the country. The wheat, ghee, and honey are good, and iron is one of the exports from the northern parts.

Kafirs.

191. This people live in a very rugged country, with numerous streams and springs; from the latter they drink, and also water their fields, which however are of little account. They derive their subsistence from their flocks of goats, which seem to be of a species superior to others known in these countries. Their cows and sheep are perhaps in equal numbers; wheat far exceeds all the other grains they cultivate; it is sown in the spring, and watered. Fuel and timber are plentiful, and their houses are constructed of wood. Some of their villages are large, containing 3,000 inhabitants, and on an average they are of an ordinary size; they are not fortified, but are situated in places difficult of access. They do not use tents in any season of the year, but

sometimes shelter themselves in caves. Within the country there is no traffic, but they exchange their ghee, cheese, goats, and vinegar for rice, cloths of various kinds, axes, but chiefly salt. Every thing is carried by men, and there is no camel, buffalo, mule, or ass in the country. They make wines and vinegars, both much esteemed, from the grapes of their own country, which are partly wild and partly cultivated; and uncultivated walnuts are abundant. This country can neither furnish supplies, nor be crossed by troops, except with the utmost hazard.

Punjhora.

192. The people subsist by tillage; their chief crop is the rubbee, and the greatest product, wheat; after which, barley. A small quantity of grain is imported from the valley of Buroul, which is in the northern part of the country of Bajour, but has its own chief, who is a Turkulanee. In Punjkora the lalm and irrigated lands are perhaps equal. The latter depends on springs and streams. But little wheat and barley are sown in the spring. Cows are the chief stock, but according to others, buffaloes; goats too are numerous, but sheep very few. The chief carriage is by bullocks and asses. The trade between Peshawur and Yarkund for the most part passes through this country, and Kasin Khan, the chief of Deer, which is the capital of it, and may have 500 houses, levies taxes on the merchants. The other villages are generally small, and some hamlets among the mountains have but five houses, or less. The mountains yield pines, which serve for timber and fuel, and also for torches. The mountainous parts are very thinly peopled, but that part of Punjkora towards the Ootman Khel and lower Swad is very populous. Tents are not used in any season of the year. Fodder is plentiful. There are few horses in the country.

Upper Mihmunds.

193. This is a hilly country, and its hills though not high, are often very rugged. Some of them yield pines, but more commonly they are covered with shrubs. The houses are sometimes thatched. The natives in general live in houses, but some tribes have black tents, and the same use is made of

koodies as in Bajour, and to a greater extent. On the whole this is an agricultural country. In some places sheep, in others goats, are the chief stock. Asses are numerous, and are the chief carriage, next to which are bullocks. In many villages a horse, mule, buffalo, or camel is not to be found. Timber on the whole is scarce, but fuel is plentiful, and there is no want of fodder. Some corn is imported from Bajour, Koonur, and the Dooab of Peshawur. The chief return made is in mats, which the natives manufacture from the Putha shrub (see paragraph 129.) From certain parts good ghee is exported to Peshawur. The fields are generally lullm, and the chief product wheat. The two crops are nearly equal, but perhaps the rubbee is the greater. The natives drink from tanks, streams, and springs. There is much hilly waste, of no use but as pasture for goats, and in some cases water is scarce. With very few exceptions the villages are small, and the population on a given surface cannot be great.

Ootman Khel.

194. This country is more difficult than even the preceding, which however it resembles in many particulars. It has more timber, its hills producing pine, and water is more plentiful. The chief subsistence is probably from the keeping of goats, and wheat the chief product. The villages are small, but if we believe the received accounts, the population is not inconsiderable, for this tribe is never rated lower than 10,000 families. They have never paid revenue, and have little amicable intercourse with their neighbours.

Khybur.

195. This is a rugged and unproductive tract, lying between Jellalabad and Peshawur. The natives live by tillage, the keeping of goats, and robbery. Water in many places is scarce, and no pines grow on the hills, which are nearly of the same temperature as those of the Upper Mihmunds. Fuel is plentiful, and there is sufficiency of grass, fresh or withered.

Teera.

196. This is an agricultural country, though goats be very numerous. The two crops are nearly equal; and on the whole,

the production is equal to the consumption. The houses are flat-roofed, and built partly of stone and partly of mud; no tents are used at any season of the year. The inhabitants are of the Afreedee tribe. West of them are the Shinwarees, in whose flocks are a greater proportion of sheep than among the Afreedees, and some of them live at times under black tents. Teera yields considerable quantities of good honey. The villages are small. The Afreedee tribe may be conjectured to be 55,000 souls; part of them live in Khybur, and that subdivision which is called Adum Khel live towards Kohat; and the northern Khutuks inhabit the continuation of their hills. Their country answers in most particulars to the description already given of that of the Upper Mihmunds.

Peshawur.

197. The plain of Peshawur is an agricultural country, and no space of the same extent in the Cabul dominions is equally cultivated or peopled. Upon the whole the khureef is the chief crop. In the plain of the Mundars the rubbee is the chief, and the like is true of that portion of the valley which the Khutuks possess. Perhaps maize is the chief crop, and it certainly is so in the vicinity of the city. The flour of maize is generally cheaper than that of wheat, in the proportion of at least three to two, and a certain mixture of it in the latter is supposed to improve it. The maize of Peshawur is remarkably white, and much esteemed. The rice of certain villages is exported to great distances, but the consumption of this article in that part of the valley which is subject to the king, is partly supplied from Lower Swad. In the same manner great quantities of wheat and some other articles of provision are brought from the country of the Mundars. The valley generally considered, does not support its own population, for the exports are inconsiderable, compared with the imports from Bajour, Chuch, Pothwar, and Kohat, especially the two former. Contrary to what is generally true of India, the khureef is commonly watered, and the rubbee commonly lulm. The watered lands depend on streams much more than wells. Jhulars are used in part by the Daoodzyes and Mihmundzyes. A severe drought is

inconvenient even to the holders of irrigated lands, as the Bard dries up unless showers fall from time to time, and a level lower than ordinary in the rivers, subjects the farmer to extraordinary labours. In the memory of people living there have been two severe dearths occasioned by the failure of the spring rains, and the calamity was increased by the resort of people from Chuch, whose dependence is on the spring or rubbee crop, cultivated lilm. The quantity of rice and wheat does not fall greatly short of that of maize. Chuna is raised in only one village, and horses here receive barley. Several grains well known in our provinces, among which the raggee, are not here to be seen. Jooaree is cultivated only to be cut green for the use of animals. Provisions are dearer than in Cabul, but fodder and fuel are cheaper. Lodging is very cheap in the town. On the whole, an army could be more easily maintained here than in Cabul. In the city they drink from wells, but in the valley in general they drink more from streams. Some of the Mihmunds and Khutuks have tanks, and near the foot of hills the natives use springs. Although the valley produces little timber, abundance is floated down from various quarters by water, and the wood work in the city is of pine. The city may contain 70,000 inhabitants, and is considerable. Of late it has declined, which has been owing rather to tyrannical proceedings, than to the decline of the government. The few wastes in this province are chiefly in the south-eastern part. Generally speaking, it is equal in cultivation to the good parts in India. The villages are about the same size as in the valley of Cabul. For carriage various animals are used, and the chief live stock is cows and buffaloes. In some places they burn cow-dung, in others, shrubs and the branches of trees, among which the olive is one.

Swad.

198 The lower part of Swad is included in the valley of Peshawur. It is a rice-bearing, well-watered, and well-peopled country. Upper Swad is mountainous, but yet tolerably well peopled, and there too the chief product is rice. Fuel, timber, especially that of the pine, and fodder, are abundant. The

chief stock is cows and buffaloes. The khureef is the chief crop, and tillage the chief source of subsistence. Cows, buffaloes, ghee, and rice are exported in return for indigo, coarse cloths, and manufactures.

Bhooner.

199. This too is an agricultural country, but grain is imported from other quarters, and the populousness is less than in Swad. The chief grain is raised to be kunganee, and lulm is more common than irrigated land. Many of the villages are large, but there are extensive tracts among the mountains without inhabitants. The mountains produce pine in abundance, and of course timber and fuel are easily procurable, but their natural verdure is said to be inferior to that of Upper Swad. This country is seldom visited, and the natives are very rude.

Pukhlee.

200. In Pukhlee agriculture is more important than pasturage, and the khureef is the chief crop. Rice is the chief product, and after it wheat. The produce seems to be about equal to the consumption. Most of the lands are irrigated from streams. The natives generally drink from springs, and live in flat-roofed houses. Timber, fuel, and fodder, are sufficiently plentiful, and ghee is very cheap. The chief stock is cows and buffaloes. Their sheep are of the light-tailed kind. The population is considerable, and the villages are of various sizes. There are certain districts individually of small account, commonly included in the revenue divisions, of which the above observations may not always be true.

Chuch.

201. This is an agricultural country, and of remarkable fertility. The khureef crop is of very little account. The rubbee is almost all lulm, and the chief thing cultivated is wheat, of which great quantities are exported to Peshawur, besides some other provisions also supplied. The few fields that are irrigated depend on wells, but the farmers are seldom at this expense except for raising tobacco, sugar, and other products of great value. They drink from wells, and some from tanks,

or the river Indus. Timber is rather dear, and therefore part of their houses are thatched. Their chief fuel is dung. The largest villages may have 350 houses; the others are much smaller, but they are numerous, and the population is considerable. Cows are the chief stock, and bullocks the chief carriage within the district; but for external trade mules are more used. The trade from Kushmeer to the west passes through this district, which also lies in the great road from Hindoostan to Peshawur and Cabul.

Huzara.

202. This is a small district, unworthy of much mention. Tillage is the chief subsistence, and the chief products are said to be wheat, barley, and mash. It has some streams from hills, and the amount of irrigated lands is equal to the *lulm*. Sheep are perhaps the chief stock. Provisions are not so cheap as in Chuch, and there are more wastes. The villages on an average have 80 houses. The natives drink from springs, rills, and tanks, and their chief fuel is shrubs.

Moozuffurabad.

203. Concerning this district, I have gathered but little, nor is it of much importance either from its produce or position. The cultivation is but little, and is irrigated. A little wheat is imported, and a little rice exported. Timber, fuel, and grass are easily procurable. The live stock is various, and the chief carriage, at least to Kushmeer, is on the backs of men. The pasturage is important.

Kushmeer.

204. This celebrated valley is admirably watered by streams and rills, which seldom fall below a convenient level. The quality of the soil is excellent, and adapted for the culture of rice, a grain which supports a great population; and the inhabitants are industrious and frugal. Very little of the produce is expended in the support of animals. There are few countries of the same extent so populous as Kushmeer. The capital cannot have less than 100,000 inhabitants, and is decidedly the largest city

in the Cabul dominions. On the mountains are fed numerous flocks of sheep, which are here a very valuable stock, yet are cows, on the whole, kept to a greater value. There are no buffaloes or camels. The chief carriage within the valley is by boats, and with most of the neighbouring districts by the labour of men. The quantity of rice produced far exceeds all the other grains and articles of food. A Kushmeeree eats wheat as a curiosity. That, like all other things, is sown in the spring. Saffron is cultivated lilm, and some of the gardens receive no water. The fruits and the palez are inferior in quality to those of Cabul, and the rice is of a coarse kind, but productive. Flesh is dear, timber and fuel cheap. The produce seems to be equal to the consumption and no more, nor could Kushmeer be easily made to yield supplies to an army not quartered in it, for the access is difficult, and carriage expensive. Fodder is plentiful, and especially rice straw, with which many of the poor thatch their houses; but in general the tops as well as the walls of the houses are of wood. The natives are proverbially unclean. The trade of Kushmeer is great, and already well known in Europe.

Rajiver, &c.

205. The southern dependencies of Kushmeer are well watered vallies, of which the chief produce is rice and maize, and the chief live stock cows and buffaloes. Wood and fuel are abundant, and the houses, whether of stone or wood, flat-roofed with timber. Provisions are cheap. The villages are small, but numerous in the bottoms, though there be much uninhabited space among the mountains.

Pothwar, &c.

206. Pothwar has a sandy soil of very poor quality, but a portion of all the three rains. Wastes are to be found, sometimes stony, sometimes broken ground, but on the whole the quantity of ground cultivated may excite surprize. The chief crop is the khureef, and bajra the bread corn of the people. The grain gives but a small produce on a given surface. There are some towns, but villages are small. Wood is dear, and part of the houses are thatched, part flat-

roofed. Some horses are bred here, and the number of live stock is considerable, so that fodder is dear. Grain is sufficiently cheap, and a small quantity is exported to Peshawur, to which they also send ghee. They and their live stock often drink from the same tanks. The number of small tanks is very great, and there are some wells in low situations for drinking. The few lands that are irrigated are chiefly watered from wells in hollow places, and are under tobacco, garden vegetables, and other valuable cultivation. Rice, sugar, maize, and chuna are scarcely cultivated, and more barley is raised than wheat. The chief fuel is cow dung, and the chief carriage, bullocks and mules. Though I have little detailed information concerning the remainder of this Dooab, to the south as far as the dominions of Mahmood Khan, I conceive that it answers in most particulars to the character now given of Pothwar.

Ghuznee, &c.

207. In this country the chief subsistence is from tillage. At the same time the pasturage is important, and being more mentioned in the neighbouring districts, the inquirer at first is led to suppose that it is the chief object. On the whole sheep are certainly the chief stock, but in some well cultivated parts cows are kept to a greater value. There are no buffaloes. The chief carriage is by camels. The quantity of khureef raised is very inconsiderable, and by far the greatest product is wheat, which is exported to Cabul; after wheat is barley, which in general is sown in the spring, in the coldest situations, for example, Khurwar. The wheat also, and indeed every thing cultivated is spring-sown. The quantity of irrigated lands exceeds the hulm, which itself has often the advantage of khwurs; the irrigated lands have water from streams and kharezas, never from wells. The quantity of palez is not very great, and there is but little fruit except in the environs of Ghuznee. The natives drink from springs, rills, and kharezas. Near Ghuznee is a dam still in good preservation made by order of Shah Mahmood Ghuznuwee; it is filled partly by rain, partly by springs and rills, and its water is used in irrigation. For fuel the natives use shrubs, the dung of cows, or that of

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